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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,367	01/06/2005	Thomas Buntin Threewitt	PPD 50705	5091

26748 7590 04/30/2009

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ART UNIT	PAPER NUMBER
1616	

NOTIFICATION DATE	DELIVERY MODE
04/30/2009	ELECTRONIC

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/520,367
Filing Date: January 06, 2005
Appellant(s): THREEWITT ET AL.

William A. Teoli, Jr.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1/21/2009 appealing from the Office action mailed 03/21/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Cornes, "Synergistic Herbicidal Compositions Comprising Mesotrione" International Application Published Under the PCT, WO 02/100173 A1 (Dec 19, 2002)

Kent et al. "Technology of Cereals An Introduction for Students of Food Science and Agriculture" Elesvier Science Ltd, ed. 4 (1994), p. 1

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1-3, 5, 6, and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornes (International Application published under PCT WO 02/100173; published December 19, 2002) in view of Kent et al. (Technology of Cereals; published 1994).

Applicant Claims

Applicant claims a method of controlling weeds while reducing injury in a sorghum crop by applying to the locus of the weeds mesotrione and prosulfuron.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Cornes teaches a synergistic composition comprising mesotrione and a second herbicide. (See abstract) Prosulfuron is an herbicide that may be added to the composition. (See page 4, Line 15). Cornes further teaches "the object of the formulation is to apply the compositions to the locus where control is desired by a convenient method. The 'locus' is intended to include soil, seeds and seedlings, as well as established vegetation. The composition can be used over a wide range of crops, such as corn (maize), wheat, rice, potato or sugarbeet. Suitable crops include those which are tolerant to one or more of components (A) or (B), or to any other herbicide, such as glyphosate that can be additionally included in the composition." (See page 5, lines 20-26). Cornes also teaches "a herbicidal composition according to claim 3,

wherein the weight ratio of component (A) to component (B) is between about 8:1 and 1:15." (See page 11, claims 4). Cornes further teaches "… the compostion contains components (A) and (B) in relative amounts sufficient to provide an application rate of at least 1.0 kg/ha, of which component (A) provides at least 0.02 kg/ha." (See page 5, lines 13-14). The compounds of the composition may be applied either separately or in combination as part of a two-part herbicidal system. (See page 5, Lines 17-19). The composition can be applied pre-emergence or post-emergence to the locus where control is desired. (See page 6, Lines 2-4).

Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)

The instant application claims a composition to control weeds in a crop of sorghum. The difference between the instant claims and Cornes is that Cornes does not teach the use of the composition on sorghum. However, it is known in the prior art that mesotrione and prosulfuron have been used to treat cereal crops of which sorghum is a cereal crop. It is for that reason that the examiner joins Kent et al. with Cornes.

Kent et al discloses, "The principal cereal crops are wheat, barley, oats, rye, rice maize, sorghum, and the millets" (See page 1, paragraph 1).

Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)

It would have been obvious to one having ordinary skill in the art to modify the invention of Cornes to be applied on sorghum crop because cereal crops are taught by Cornes

and sorghum is classified as a cereal crop, thus one would expect Cornes's composition to also work on sorghum. With regard to the application rate of mesotrione, Cornes discloses an application rate, which encompasses the instant rate of 50- 300 g/ha as recited in the claimed invention. In the absence of showing of the criticality of the narrower application rate disclosed in the instant invention, Cornes makes obvious the instant application rate. With regard to the amount of component B (prosulfuron) amounting to 0.5 – 400%, Cornes teaches a ratio of 8:1 and 1:15. Thus it would be obvious to one of ordinary skill in the art to manipulate the amount of herbicide B in view of the guidance provided by Cornes and to obtain the optimal concentration. For the foregoing reasons the instant method of controlling weeds would have been obvious to one of ordinary skill in the art at the time of the instant invention.

(10) Response to Argument

Applicant argues that the composition taught by Cornes in which prosulfuron is a constituent of a tertiary mix of mesotrione, pyriftalid and prosulfuron which is useful for use in rice crops. Applicant further argues that it would not have been obvious from such a teaching to then use this herbicidal composition on sorghum crop. Applicant's arguments have been fully considered and found not to be persuasive. It is the examiners position that it would have been obvious to one of ordinary skill in the art to apply an herbicidal composition as taught by Cornes on different types of crops, especially, crops of the cereal crop genus. Even assuming arguendo, that it would not be obvious to try the herbicidal composition of Cornes on sorghum crop, applicant

claims the use of a herbicidal composition comprising mesotrione and second herbicide selected from prosulfuron, dicamba, 2,4-D, halosulfuronmethyl and quinclorac. Cornes teaches a composition comprising mesotrione and dicamba that would have been obvious to use on any cereal crops such as sorghum crop.

Applicant next argues that the composition comprising mesotrione and prosulfuron was found unexpectedly to provide a superior herbicidal properties and a reduced injury to the sorghum crop. Applicant's arguments have been fully considered but not found to be persuasive. Applicant's unexpected results are not commensurate in scope with the instant claims. Applicant has only shown that a composition of mesotrione (105.0 g/ha) with prosulfuron (20.0 g/ha or 40.0 g/ha) unexpectedly provided for a superior weed control and reduced injury to sorghum crop over mesotrione alone. Applicant has not shown data for all heribicidal concentrations and has not shown convincing unexpected data for all combinations of mesotrione with a secondary herbicide selected from prosulfuron, dicamba, 2,4-D, halosulfuronmethyl and quinclorac. For the foregoing reasons the rejection of claims 1-3, 5, 6, and 9-12 under 35 U.S.C. 103(a) is maintained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Johann R. Richter/

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